

In the Claims:

1. – 17. (Cancelled)

18. (Currently Amended) A communication receiver, comprising:

a switch comprising,

at least two inputs, each input configured to be coupleable to at least two signal carrying devices,

a switching mechanism configured to multiplex signals received at said inputs; and

an output configured to carry the multiplexed signal;

a downconverter comprising an input coupled to the output of said switch and configured to downconvert the multiplexed signal; and

a signal processor comprising an input coupled to receive the downconverted multiplexed signal and an output;

wherein:

said signal processor is configured to provide, at the signal processor output, a data signal substantially corresponding to data contained in a communication signal carried by the signal carrying devices;

an A/D converter ~~configure~~ configured to convert the downconverted multiplexed signal to a digital signal;

a demultiplexer configured to demultiplex the digital signal into at least two component digital signals, each component digital signal containing a digital representation of a portion of the communication signal;

a channel estimator configured to receive the component digital signals and provide at least two estimation signals each related to a phase and amplitude shift of one of the at least two component digital signals;

a beam-forming processor configured to receive the at least two component digital signals and the at least two estimations signals and provide a demodulated signal; and

a decoder configured to receive the demodulated signal and provide the data signal;

wherein said communication receiver is a wireless communication receiver and said signal carrying devices are antennas.

19. (Previously Presented) A communication, comprising:

a switch comprising,

at least two inputs, each input configured to coupleable to at least two signal carrying devices,

a switching mechanism configured to multiplex signals received at said inputs; and

an output configured to carry the multiplexed signal;

a downconverter comprising an input coupled to the output of said switch and configured to downconvert the multiplexed signal; and

a signal processor comprising an input coupled to receive the downconverted multiplexed signal and an output;

wherein:

said signal processor is configured to provide, at the signal processor output, a data signal substantially corresponding to data contained in a communication signal carried by the signal carrying devices;

said communication receiver is a wireless communication receiver and said signal carrying devices are antennas; and

the signal processor comprises:

a demodulator that receives at least two digital signals each corresponding to a digital representation of a portion of the communication signal at a lower frequency which is received by one of the at least two antennas, the demodulator providing at least two demodulated signals each corresponding to one of the at least two digital signals and that provides at least two error signals each of which corresponds to an error rate of one of the demodulated signals with respect to an expected signal;

a diversity controller that receives the at least two error signals and that provides a selection signal and that provides a selection signal indicative of which of the demodulated signals of the at least two demodulated signals has a lower error rate; and

a memory that receives and stores the at least two demodulated signals, the memory outputting as the data signal one of the at least two demodulated signals in response to the selection signal.

20. – 34. (Cancelled)